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ABSTRACT

Macomb Community College (MCC) in Warren, Michigan, has a commitment to support business and industrial development, consequent employee retraining, and program design. In addition to helping workers in their retraining and/or relocation, the college provides systematic support in the development of basic skills. Occupational programs have tended to be vertical in design, i.e., they provided students with as much depth as possible in a limited area. New faculty coming from industry show greater interest and willingness to reevaluate program composition and consider a horizontal approach, i.e., a balanced selection across the technology area. Other factors bringing a shift in thinking about horizontal programming are changes in approaches to labor relations and work design in local industry. A formal long-range plan for the Technical Division at MCC is being developed which will establish several key and strategic concepts and considerations. This planning approach should help the college deal with change. To help the college adapt to external forces driving the changes, Macomb is formalizing a participative and formal process that openly deals with issues and seeks commitment from faculty and administration alike. Macomb's effort has included development of an advisory committee, identification of concerns with which the Technical Division must deal in setting a course of action for the future, involvement of faculty as leaders in the leadership process, and encouragement of faculty participation in the change process. (YLB)

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Making the Transition in Technology, Training, and Education

A Presentation at the 11th Annual Conference of the National Council for Occupational Education

by

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Background of Macomb Community College and Its Service Area

Macomb County and Macomb Community College lie just to the north of Detroit, Michigan, and are strongly affected by the same economic forces that impact the Detroit metropolitan area. The College is a comprehensive, multi-campus public institution, with an enrollment of over 30,000 students. Over 8,000 of these students are enrolled in various programs within the Division of Technology.

Macomb College has a long tradition of serving the needs of the business, health, and industrial communities. Records show that we have articulated training agreements with an employer base of over 600, which includes providing related instruction to 40 different trade areas for 1,600 apprentices. A close working relationship with the community is maintained through a variety of structured interactions, including apprentice programs, cooperative education, advisory committees, a large adjunct faculty drawn from local businesses and industrial plants, and a standing offer to tailor instruction and services to meet specific employer needs.

Continuing a trend that began a number of years ago, more students now enroll in our 87 occupational programs than in the liberal arts transfer curriculum. This pattern is being repeated around the state of Michigan, where this year 131,000 adults enrolled in community college occupational programs, representing over 51% of the total enrollment in the 29 Michigan community colleges.

Several factors are causing the community colleges to modify existing programs and in some cases expand their occupational offerings. First, demographics have changed--the 18-24 year old traditional job-entry population is declining. Second, career changes are becoming more and more common for a

more mobile work force. Third, the exploding increase in the volume of scientific and technical information has created a demand for constantly upgrading the skills of the currently employed and for retraining displaced workers.

Macomb County, our primary service delivery area, is highly industrialized with slightly over 38% of its employment concentrated in the manufacture of transportation equipment. Of the counties around the metropolitan Detroit area, Macomb County is the one most closely tied to the automobile industry. Each of the three largest auto companies (General Motors, Ford, and Chrysler) has major installations here. The county is also the home of the renowned General Motors Technical Research Center, several large machine equipment manufacturing companies, General Dynamics, and hundreds of smaller job shops. The county population has a major concentration of skilled trades including pattern and model makers, millwrights, and electricians. Concentrated within 25 miles of Detroit are more tool and dies shops than in any other area of the world. Macomb County is located within that 25 mile area.

Significant job changes are taking place in our service area. Most of these changes are a direct result of industries' increased utilization of new technologies. Understanding this county's dire economic straits and realizing the need to support local business and industry as it develops and diversifies, the College made a conscious commitment five years ago to examine and reallocate its current human and material resources to support local economic development and revitalization. At that time, it was clear that the College could not anticipate new fiscal resources and that it would probably even lose some funding. However, the urgent needs of local business and industry demanded a flexible and even more supportive response on the part of the College as it is the only post-secondary educational agency in Macomb

County (population estimate-690,000). It was clear that fresh efforts were needed to cope with and adjust to a changing environment being driven by technological changes. Making the transition from "what was" to "what is needed" and "what will be needed" is the challenge which our College has undertaken. Some of the directions that have been and continue to be taken by the College are detailed in the following pages.

The Macomb Community College Response

Macomb Community College, like other similar institutions around the country, has a commitment to provide low cost - high quality education for our entire community. The main thrust of our support of industrial and human resource development is occurring in the mainstream of Macomb's instructional program, both credit and non-credit. The majority of our business and industrial retraining efforts continue through apprentice training, a small business institute, a newly formed Center for Human Resource Development and the training of individuals in our numerous instructional programs at either their expense or that of their employer. To continue to provide relevant and high quality instruction for some 30,000 persons has required re-deployment of staff and major curricula developments along with significant investments in facilities, equipment, and faculty retraining.

In addition, the College is (a) using its expertise to support the development and implementation of unique training components for business and industry, (b) fostering local, state, and national economic development efforts, (c) continuing its participation in federally sponsored training programs.

Although the record of the College has been impressive, it was accomplished under conditions which no longer exist. It is important to

emphasize that Macomb's response has been possible only through a re-alignment of institutional priorities. The new conditions, however, are straining our human and fiscal resources. The situation is further aggravated by significant reductions in state support which have reduced our operating funds and by changes in state policy which has all but eliminated the potential of state funds for capital purposes. Indeed, recent discussions with our state officials and others involved in the distribution of Perkins Bill funds have resulted in decisions that favor equal (not equitable) distribution of these funds. The emphasis is on equal distribution to institutions not enrollment or population served. Without further opportunities for resources, there is some question about our ability to continue to respond effectively to the expressed needs of our community.

Implications from the Macomb Experience

Our experience in development and training has given us a better understanding of business and industrial problems and accompanying structural unemployment faced by much of our community. These implications are presented here because they continue to influence our College's approach to the support of business and industrial development, consequent employee re-training and program design.

Extended Training for Total Human Development

Retraining and/or relocation will present different challenges for different groups of people. These are workers whose skills are in demand and need only to better understand the job market and to present their skills effectively to become employed once again. Other skilled workers may need only minor upgrading. For example, the industrial electrician may need to become familiar with principles of hydraulics and pneumatics to service some

particular automated equipment. However, the manufacturing worker displaced by the robot or automated factory will need significant training to be employed servicing or fabricating such equipment. Unfortunately, those least skilled are also those most in need of basic human skill development to even begin the extensive training necessary for employment. Historically, the unemployed persons referred to the College often lack even the basic academic, personal, and coping skills necessary to successfully complete the training program of their choice.

We have made serious efforts to deal with this problem by providing systematic support in the development of basic skills for these people. But, this problem raises a larger philosophical issue. As technology changes, skills directly related to those technologies often become obsolete.

As stated previously, much of Macomb County's industry is related to the manufacture of transportation equipment. Another leading industrial component of our service area is that segment that provides the design and tooling of machinery and equipment with which other manufacturers can produce goods.

Some of the significant job changes which are taking place in our service area are directly atttibutable to industries' increased utilization of new technologies. Some examples include:

* **Machinists** have always been in high demand. Today, the need is for computer-trained machinists and individuals trained in numerical control technology.

* The expanding use of flexible automation devices, including **robots**, within the automobile industry requires advanced training for a wide variety of skilled trade areas including welder equipment repairmen machine repairmen, tool-making, and industrial electricity.

* The increased use of **plastics** and **electronic** components in the manufacture of automobiles.

* The increased interest in **solar** and other alternative energy sources.

* The use of **electronic** components in an ever increasing array of applications.

* The introduction of **interactive computer graphics** into the design field.

* The movement away from the single skill area journeyman. Among others, Chrysler Corporation is developing **cross-trained** individuals in the four maintenance trades of pipefitter, electronics, millwright and toolmaker. This trend is expected to accelerate.

* The recently re-negotiated contracted at the automotive companies establish a **special re-training and upgrading funds** as a recognition by both the United Auto Workers (UAW) and the auto companies of the need to provide skill upgrading and more diversified training.

* Greater emphasis on **health and safety** within the workplace and the growing need for trained technicians working with environmental concerns.

The basic problem remains - where are the jobs? Where will these newly trained individuals find meaningful employment now and for the next several years? Demographic and other forecasts appear to signal skilled labor shortage for the 1990's. What can be done until then? Immediate employment even for those now receiving training in an emerging technological field may not be available at the completion of that training. Job development is a critical corollary to every training effort.

* Regulations and resulting procedures must remain in place over a fixed number of years. Too frequent changes in direction dilute resources and alleviate desirable outcomes. The resulting adjustments needed to tool up for these changes take away from the ability to apply long range solutions.

* More effective research is required to predict changes in work-force needs. In this way, realistic educational programs reflecting long-range national needs will be developed. Skills, jobs, and industries becoming obsolete must be identified earlier. Emerging needs must be identified far enough in advance to provide the lead time required for an orderly transition of people and skills.

* Basic skill development must be part of the long-range solution to avoid repetition of dislocation for individual workers. Better strategies and more realistic time frames are required to satisfy the need for total human development and specific occupational training to avoid repetition of dislocation for individual workers.

* Expanded staff development efforts must be particularly encouraged. Faculty members, as any other skilled worker, must be kept current in their fields. Various approaches to such development should be encouraged including faculty/industry exchange programs.

Macomb College is very similar to many other community colleges around

the country; a college reaching maturity. After having experienced rapid growth, we are now reaching a plateau; even slightly losing enrollment. It is an institution that added programs and courses in previous years as a result of internal forces. In contrast, external forces are becoming more influential in driving changes within our organization.

Occupational programs have tended to be vertical in design; that is, programs were configured to give the student as much depth as possible in a limited area; e.g. welding technology required one design course, two metallurgical science courses, and 15 welding courses plus 18 general education for the 62 credit hour degree. The electrical engineering technology (EET) program required the 18 general education, two math, one physics, and the balance EET courses. These programs are selected to demonstrate to you the traditional approach to programming at Macomb Community College. Few programs before 1979 were constructed using a horizontal approach; horizontal meaning a balanced selection across the technology area. Part of the cause of this traditional approach resulted from the two level structure of the work force in this area; a large number of unskilled workers and as well as a large number of very skilled. The very skilled were employed in companies that had strong collective bargaining agreements. The collective bargaining agreements were very specific in language and separated skill areas into electricians, pipefitters, etc. That industrial emphasis carried over into program design at Macomb Community Colleges and others in this area as well.

There are 56 full-time faculty employed in the Macomb Technology Division providing education and training for approximately 8,000 students. It is only recently that numbers of new individual are being hired, replacing some who were with this Division for 15-20 years or more. Most of the new faculty are

coming to the College from industry. As a result of their industrial experience, as well as the changes in industry (including the reduction of separate job classifications within company or plant), there is a greater interest and willingness to re-evaluate program composition. An additional motivator is the shift in enrollment among certain of the technology programs.

Concurrent with this new interest in restructuring programs, there has been a reduction in financial support form the State of Michigan and a reduced ability to finance new buildings. Macomb completed three new buildings in 1982 bringing the total square footage of all campuses to over 1,200,000 square feet. It is unlikely that either state support for operating funds will be increased or that building funds from any source will become available in the near future. As some programs reach their sunset, others are rising or emerging to take their place and to compete for these shrinking resources.

About two years ago, it became clear that Macomb's programming would have to change if we were to continue being a viable resource for local business and industry. That's not to say that what we had been doing was wrong or that everything might have to change.

One piece of evidence that led us to proceed slowly was a recent survey of Macomb graduates who had been in the job market form 3 to 5 years. Of these, 97% of the respondents said their career had been advanced because of course work completed at Macomb Community College. Seventy-four percent rated Macomb job training as above average. Equally significant was the fact that these graduates showed unemployment ranging from 4.5% to 7% - substantially below what was then about 13% in the six county area around metropolitan Detroit.

Additional factors bringing about this shift in thinking about horizontal programming are the changes in approaches to labor relations and work design in local industry; from labor-management confrontation to quality of work life

(QWL) and employee involvement (EI) efforts. Because this area is so heavily industrialized and unionized, the change in the industrial community is bringing down barriers that have existed for years; e.g. that design function didn't communicate with engineering or manufacturing with production. These changes are impacting long standing job classification barriers and opening up communication channels that have long been closed. Clearly, we didn't want to make change - just for the sake of change - or to eliminate what we were doing that would continue to be right for the rest of this decade and into the next.

Our move two years ago began concurrently with a number of other efforts. These included:

1. Changing the name/direction/goals for what had been a traditional, institutional data collecting oriented Research and Development Office to one responsible for Planning and Development playing a much more active role in College affairs;

2. Installing a formal evaluation system for occupational programs;

3. Increasing advisory committee input in new programs resulting in a more horizontal emphasis;

4. Participating in a state funded four college consortium research project in 1983 that made a study of emerging technologies in southeastern Michigan (this study identified or confirmed a number of possible directions for us to take);

5. Forming a faculty committee using the data from the emerging technologies study and other research as a base to begin an evaluation of industry's move to computer integrated manufacturing (CIM);

6. Obtaining a grant that established a Center for the Innovation of Technical Education at Macomb Community College; The function of this Center, using faculty, is to study current job tasks now required in industry, as well as staying abreast of changes in these tasks resulting from the introduction of new equipment into the workplace. Participants in the Center's activities are developing a model for the evaluation of current programs and a second model for the development of new programs to incorporate these changes in new technology. One projected secondary outcome will be the ability to bring new programs on line in a much shorter time span, since it doesn't appear that the luxury of a long lead time will ever be common again.

7. Changing the College Mission Statement to reflect the equality of commitment for responsive training and assistance to economic development with general education and the more traditional occupational programs; The previous mentioned Center for Human Resource Development has been established to deliver these company specific training using regular college resources.

8. Designing and delivering Job Training and Partnership Act (JTPA) programs along these new horizontal lines; (e.g. a program on integrated manufacturing has been conducted three times under JTPA with a very high placement rate (over 90%) and a high retention rate.

9. Introducing a new formal system of student assessment, placement, and advising;

10. Establishing new and unique arrangements with local business; These include participation in a faculty lease arrangement - becoming a General Motors (GM)-ASEP College; selection by Chrysler Corporation as the pilot college in the development of an automotive technician training program; designation as a UAW-Ford Re-employment Assistance Center;

11. Conducting activities beyond our traditional boundaries; We have trained visitors from Mexico who were to be employed by GM in its Mexico plants. Students from Saudi Arabia have been trained in our security program and we will soon be providing computer aided design training in England for employees of British industrial concerns.

These and other similar efforts will increase the ability of Macomb Community College to meet a variety of needs by students and business in the upcoming years.

A major piece yet to be dealt with is the curricula that must meet those needs in preparing students and workers for the jobs as they are being structured and restructured.

The data gathered from a variety of studies previously mentioned, as well as literature, research and strong advisory committee input was presented to the Technical Division Advisory Committee which is made up of technology faculty and administrators. This group has been meeting over several months preparing the foundation for a long-range plan for the Division. Its work to date has yield four key documents. These include: (1) a Division Mission Statement, (2) a set of assumptions, (3) a group of definitions, and (4) a list of seven issues that have to be dealt with. A time schedule has been developed and is designed to assist in meeting a target date of May 15, 1986. This is the date set for presentation of the plan to the Academic Vice President.

It is recognized that this plan, rather than being one hard and fast, will be one that serves more as a guide for decisions over the next several years. We have concluded that a long-range plan of even 3 to 5 years will need adjustments. So, our goal is to establish several key and strategic concepts and considerations. Some of these include:

(1) A focus on systems, not details (planning as a way of thinking);

(2) It will be "client" and "customer" driven;

(3) Feedback from research and our sources of professional knowledge will continue to be employed; it is important to continually monitor and make necessary adjustments.

(4) We will need to integrate alternate technology delivery systems into the the curricula (objectives dependent upon resources).

(5) We will maximize the knowledge/experience/strength of our own staff.

(6) Fundamentals will be incorporated rather than fads.

(7) A need to evaluate our traditional approach of being "all things to all people" in light of the consideration of concentrating on a limited number of broad specialty areas.

(8) The AAS degree and certificate will continue to be important to students and employers; but, students must perceive that value.

(9) It will require total college participation and support.

(10) Remain flexible; a long-range plan that results it being fixed and inflexible can be dangerous. It should be a dynamic process.

(11) There will be more customers in the future (companies and students) but they will lead to a greater variety of demands and a greater number of training agencies (public and private) and individuals willing to meet these demands.

(12) A much greater marketing emphasis will be required than in the past; for the college as a whole and for specific programs.

(13) Innovation can create a dangerous economy because on one clearly knows what direction it might take - but we must keep up with it.

(14) There are two sides to consider, human and statistical. We need to develop an atmosphere of professional involvement and participation and at the same time recognize the limits of the statistical.

(15) Remember, as Will Rogers said, "even if you're on the right track, you'll get run over if you just sit there".

The Role of Planning in Making the Transition

Richard Heydinger of the University of Minnesota points out that the growing interdependence and complexity of our society has influenced many educational organizations to adopt operational mechanisms by which a greater control of their destinies can be achieved. The technological arrival of both "soft" technologies (the social systems by which we interact) and "hard" technologies (the physical hardware) have brought new emphasis for the word CHANGE. Increasingly, institutions are seeking more formal planning approaches to deal with that CHANGE.

Recognizing that the instructional program is the cornerstone for the educational enterprise of Macomb Community College, the planning and evaluation of educational efforts have been given increased attention and higher priority in recent years. It is believed that the adoption of appropriate planning models and their subsequent implementation will increase the likelihood of sound decision-making relative to the fundamental mission of the College. Because of this emphasis, the College expects to continue in a leader-role; one that it has enjoyed among post-secondary institutions in the United States in past years.

Today, you are being presented with a portion of the planning approach being taken at Macomb Community College; that portion dealing with the planning of the future of the occupational programs located in the Technology Division of the College. Before getting into the details of the planning process, it should be pointed out point out that it will not be easy to make the necessary CHANGES. Certain faculty who have been conducting successful programs are being asked to (a) consider adjusting content of courses, (b)

join with other faculty in new ventures, (c) consider delivery systems with which they have little or no experience or even familiarity. In essence, the fundamental challenge before us is that of convincing people to CHANGE some of the ways they do their business; to get them to seriously look at data and information and to get them to participate in achieving more effective ways of meeting pre-determined goals.

Apprehension and resistance is natural and this is to be expected. A formalized planning effort with a high degree of faculty involvement is our response to achieving this CHANGE. This effort is focusing on issues and a direction that will allow our school to make the most appropriate rational decisions as we experience the TRANSITION into the decade ahead. The way a school lives with this TRANSITION will determine in large part its own destiny and the achievement of its mission.

Transition and Technology

David Snyder, a well known futurist, makes a pertinent point about the TRANSITION to the future when talks about the confidence he has in making statements about future events regarding the adoption of new technologies, both hard and soft. Generally speaking, the hard technologies take a longer period of time for their adoption. Factories, dams, schools buildings are inherently durable and have long life spans. And many of the major innovations such as those we have seen in recent years are taking years for adopters to make necessary conversions and adoptions. On the other hand, he views the soft technologies as being easier to implement. He cites the installation of a host of legislation and other social change as being much more difficult to predict because of the dynamics of social conditions in the country. This is especially true in times of TRANSITIONAL CHANGE.

Social technologies are sometimes creations of the moment and as such, they offer policy makers and others the opportunities to shape the future. Social technologies are often made possible by new physical technologies. Snyder points to flex-place as a new social technology that has been made possible by a new physical technology - the micro computer. He suggests the most substantial increases in productivity are often achieved through such synergistic combinations of hard and soft technologies.

Therein lies a major challenge to educational and training institutions; to accommodate those technological TRANSITIONS. Institutions such as ours must adapt to the external forces which are driving the CHANGES all around us. We are attempting to install social technologies internally that are responsive to those physical technologies and which predicate our internal systems and operations. One of Macomb's strategies is to formalize a participative and formal process that openly deals with issues and seeks commitment from faculty and administration alike to deal with them.

Planning

There exists many models and definitions of planning. Though words used to describe and define planning vary, there are some generally accepted notions and characteristics noted by learned authors and proponents of planning.

Planning is focused on the future. It is thought to be most useful as a general guide rather than a detailed and fixed blueprint unalterable by changing conditions. Peter Drucker, a management expert, emphasizes the "futurity" of present decisions. He views current decisions as a critical element in planning. Planning is the specification of a desired state or condition an institution strives to achieve. It is rational and data based. It is a process that builds on quantifiable and qualitative evidence and

yields rational decision-making. And most importantly, planning focuses on process rather than produc

In describing to you the direction Macomb has taken in recent months in its planning for the Technology Division, it should be emphasized to you that the processes and strategies that have selected have been done so in the interest of achieving an effective long-range plan for the Division.

It is recognized that instructional program planning occurs regularly, informally or formally, and that it always has, in some form or another. The difference, today, is the emphasis on more rational decision making and more comprehensive planning (Heydinger, 1980). As Heydinger points out, it is possible to cite at least thirteen different styles/models used to plan instructional programs. While such a taxonomy suggests exclusiveness of each model, it is important to realize that most institutions, though often unknowingly, apply and utilize a variety of these styles.

Thus, whether or not the predominant planning style in an institution is formal democratic, entrepreneurial, administrative initiative, curriculum committee, needs driven or any other listed by Heydinger or other authors, the principals driving the planning in an institution must tailor an approach that draws upon a number of different models.

Macomb's Effort

Early this spring (1985) Dr. James Blanzy, Vice President for Academic Affairs, charged the Dean of Technology and the Director of Planning and Evaluation with creating a three to five year plan for the Division of Technology. To accomplish this, an Advisory Committee made up of faculty and administrators from the Division has been engaged to help guide and influence the development of this plan. Within the College's Guidelines for Operation

and its subsequent Mission Statement, the Technical Division Advisory Committee has been developing a process for planning the role of the technical education. In establishing this planning process, a set of goals will be established which will serve to guide the actions of the Division in the next several years.

The first step was to provide a framework within which this plan would be spawned. That framework identified the need to more clearly define terms to insure proper communication. The clarification of selected terms has been debated and finalized.

Issues were identified as those concerns with which the Technical Division must deal in settling on a course of action for the future. The issues will serve as a foundation for goal setting. Some issues are controversial and may be difficult to deal with. However, resolution and understanding with agreement with objectives emerging from the issues are critical to the completion of this project.

The Leadership Process

Harold Boles (1982), formally of Western Michigan University, characterized leadership as a process tending toward goal accomplishment through personal or group influence, authority, or power. To accomplish the plan for the Division of Technology, a process has been set in motion that clearly articulates the goal at hand and relies on a network of dyadic and group relationships in the influence process.

Leadership techniques which can be employed to help accomplish the plan can be found in a variety of ways. Personal experiences, research literature, intuition, leader charisma, various initiatives or application of formal power can and are utilized.

Five specific leadership techniques deserving of consideration have been

espoused by Kim Cameron, formally director of the Organizational Studies Program at NCHMS and now at the University of Michigan. They play upon the reality of culture in an organization. The techniques draw upon leadership strategies involving language, ritual and symbolic behavior, and all of them work by modifying the "shared meanings of an organization." (Cameron)

(1) Interpreting history and current events - don't change behavior; put a vision into works persuasively; the vision becomes a social fact; Interpretation and re-interpretation of meaning remains a powerful tool of change;

(2) Using rituals or ceremonies - representation of substantive changes; symbolic affirmations of a commitment to a better future;

(3) Using time and measurement - Time on task denotes importance; appearance of priority; what is measured always receives more attention than what is not measured; efforts to quantify an activity increase it importance;

(4) Redesigning physical space - conveys a message that something is going to be different; better join the wagon train;

(5) Introducing doubt - it may be necessary to disrupt a comfortable environment in order to make it receptive to change; challenge the core belief of the culture to bring that belief to be the surface in light of new directions;

All of this activity occurs in an environment of economical, political, social, and demographical change. A variety of data and information is readily available and is intended to be used in shaping opinion of "what is" and "what should" and/or "what will" be. In the interest of obtaining some agreement or at least accedence to understanding the current external influences on technological training and education, key environmental assumptions have been developed and agreed upon. This was done with the participation of the Dean's Technical Division Advisory Committee (DAC). These assumptions provide part of the framework of the planning process and help set the parameters within which this planning will take place. The involvement of the DAC recognizes the critical role of the faculty as leaders in the leadership process. Faculty expertise, energy, and creative thinking

are necessary inputs into the planning of change in the instructional activities. Now that a planning framework has been established, individual faculty will have the opportunity to gain input into the formal planning process.

Making the Transition - A Faculty Perspective

There is no question that a transition will be made in education. The paramount element of that transition will focus on improving the quality of students. Where the auto industry is attempting to produce a better car, educational enterprises must direct their energies to produce a more qualified, reliable and productive graduate and employee.

Should this goal of improved quality not be accepted, then all the "high tech" equipment, textbooks, and delivery systems will never achieve their fullest potential or may end up as expensive failures; failures that waste tax payer dollars and erode public confidence in education. There is reason to welcome change when it is linked to quality.

In the recent past, many educators have promoted change that highlighted educational "relevency," "viability," and experiences producing a "well-rounded" individual. The unfortunate result of these efforts is now the subject of much concern among governmental study commissions which is widely publisized in the public media. The media regularly focuses on the growing number of marginally literate graduates and career cripples; educated people who may have lost their only opportunity to participate fully in our historic and plentiful way of life. These people may not be able to make their contribution to society. They may have, forever, lost their functional independence and freedom and, who instead of being taxpayers, are chained to the wasteful and absolutely nonproductive social institution of perpetual welfare. Achieving quality education with a renewed emphasis through

changing technologies might fail - can fail - but, need not fail.

One thing is certain -- if quality becomes only another buzzword, then failure is virtually assured. On the other hand, if collectively quality is sincerely and honestly pursued, success is within reach. This success will require a united effort. It will involve each level of the educational insitution accepting the responsibility inherent in its particular office and position.

Administration may have the most difficult job as it must design and provide the mechanics to implement and support change. It must create the enviroment and opportunities for change, yet cannot by their own effort affect the change in the learning environment.

It is an established conditon of change that it is accompanied by resistance, suspicion and outright opposition. Honest resistance is expected, often justifiable and essential to a successful transition. It is the substance that hones and polisheschange into a fine working tool. Resistance refines the efforts of change and justifies the results by insuring that the existing good is not lost in the process; an awesome administrative task when one considers that time may not be on its side.

In a free society, competition is a real factor. Proprietary schools, industrial in-house training and more recently established retail, service and manufacturing institutions offering educational programs are now offering educational and training programs to the buying public. At the same time there is a growing public interest in increasing the competition in education and debate among decision makers about closing some the least efficient tax supported institutions.

Planning and evaluation are critical in achieving meaningful change. Support must be strong from administration and faculty to gather, evaluate and

disseminate appropriate information; information that is essential to prioritizing, planning equitable financing, staffing and the timely creation of quality programs. Coordinated efforts must be encouraged from offices of planning with operational instructional departments to develop acceptable and efficient methods of monitoring and evaluating the progress of new and on-going programs. These efforts must be include the capability of identifying and targeting future instructional needs related to industrial developments.

If faculty does not enthusiastically join in this process, then all else will make little difference. Where success involves the collective effort of each agency of the college -- the faculty represent the critical link in the system. It is essential that faculty participate fully in the process. Not only that they recognize the importance of quality in the classroom, but that their goals reflect the real needs and standards of industry. If this is to be, then faculty, as the experts in their fields must develop and maintain the closest possible working relationship with industry; actively soliciting its support and criticism.

Faculty must also be willing to examine the possible advantages of non-traditional programs; even though that cross established departmental lines. Efforts must be made to avoid or eliminate unnecessary duplication and to achieve optimum utilization of existing facilities, funds, and staff.

The planning currently under way at Macomb Community College is exploring various intergrative possibilities. For example, the Technical Illustation Program is currently house in the Graphic and Commercial Art Area. Technical Styling is housed in the Design/Drafting Area. The goals and objectives of the two progams are very similar and reflect job descriptions used in business and industry. The technicans trained in these areas command high salaries and their need is well documented. Yet, both programs suffer from under enrollment and excessive class cancellations.

Serious consideration is underway to combine these programs. It is anticipated that the result will:

1. Remove any confusion in the minds of students caused by two similar if not conflicting offerings.

2. Minimize class cancellations by placing the available students in one class rather than splitting them between two.

3. Improve enrollment by running more classes more often, thus, increasing the opportunity to pursue a degree with greater convenience and contribute to a greater number of degree completions.

4. Better utilize the instructors who are proficient in this technolgy.

5. End up with a much stronger program that encompasses the best of the two which are merged.

A more difficult challenge for faculty will be found in their willingness to move away from adversary positions common to the typical faculty orgaization; toward a position that embodies a genuine acceptance of academic responsibility and cooperation. This is not to say that faculty are opposed to quality but the typical union mentality and orientation may become the geatest national obstical to achieving it. This need not be the case.

Typcially unions are designed to protect its members' jobs and to improve their wages and working conditons. This is all well and good. But, it has come to pass that unions, in general, have failed miserably to insure quality performance in the classroom. The protection is too complete and self-defeating. Unions, no more than management, cannot avoid accepting their share of the responsibility for the decline of American education and production standards.

The time has come when unions must take the "guild" approach. This will require a collective change of attitude. It will require that security be found in the quality of performance and the public's confidence and need for educational service.

This will only happen if faculty leadership is willing to redirect their

efforts through negotiation; toward developing and maintaining proficiency standards that insure quality classroom performance. Such a "guild" would not allow the reassignment of a displaced history instructor to, say, a typing class because of seniority. Seniority is a poor and unacceptable reason when compared to the demoralizing effect it has on students, the progam and qualified instructors. Together, all members of the educational enterprise must recognize the importance of sharing a common culture, a common set of goals and an enlightened sense of direction. Quality and achievement by students and organization members will result.